

California Regional Water Quality Control Board  
Santa Ana Region

RESOLUTION NO. R8-2003-0074

Requesting that the State Water Resources Control Board Require  
the Implementation of a Vessel Sewage Disposal Program in Newport Bay and  
Huntington Harbour, including the Installation of Pump-out Facilities and Dump Stations  
at Specified Vessel Terminals and  
Rescinding Orders No. 88-83, 88-84, 88-85, 88-89, 88-91

WHEREAS the California Regional Water Quality Control Board, Santa Ana Region  
(hereinafter Regional Board), finds that:

1. The Clean Vessel Act prohibits the discharge of sewage into No Discharge Zone waters.
2. Newport Bay and Huntington Harbour were designated as No Discharge Zone waters by the U.S. Environmental Protection Agency in 1976. At that time, there was an appropriate number of pump-out facilities in Newport Bay and Huntington Harbour. Since that time, there has been an increase in the number of vessels using both harbors.
3. In 1988, the Regional Board found that the vessel waste program in Newport Bay was inadequate and thus adopted Orders No. 88-83, 88-84, 88-85, 88-89, 88-91 requiring the installation and operation of pump-out stations at specified terminals.
4. Water contact recreation (REC1) is one of the beneficial use designations specified in the 1995 Water Quality Control Plan (Basin Plan) for Huntington Harbour. Water contact recreation (REC1) and shellfish harvesting (SHEL) are among the beneficial use designations specified in the Basin Plan for Newport Bay. The Basin Plan specifies numeric water quality objectives for fecal coliform bacteria in order to protect these designated beneficial uses of Huntington Harbour and Newport Bay. Discharges of sewage from vessels adversely affect these beneficial uses and may cause or contribute to violation of the fecal coliform objectives.
5. In 1994, Newport Bay was listed on the 303(d) list of impaired water bodies due to bacterial contamination. In 1998, the Regional Board established the Newport Bay Fecal Coliform total maximum daily load (TMDL) to address the bacterial contamination. The TMDL includes a zero waste load allocation for vessel waste discharges, in recognition of the No Discharge Zone status of the Bay.
6. In 1994, Huntington Harbour was listed on the 303(d) list of impaired water bodies due to bacterial contamination. No bacteria TMDL has yet been established for Huntington Harbour. Once established, the TMDL is expected to include a zero waste load allocation for vessel waste discharges, in light of the No Discharge Zone status of Huntington Harbour.
7. California Harbors and Navigation Code Section 776 provides the authority to the State Water Resources Control Board (State Board) to require vessel terminal owners/operators to provide adequate vessel sewage retention device pump-out

capability at locations that are convenient to the vessel users. Title 23, Chapters 20 and 20.1 of the California Code of Regulations implements the Harbors and Navigation Code requirements for vessel sewage waste.

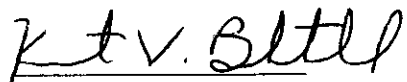
8. Title 23, Article 2, Chapter 20.1, Sections 2833 through 2835 require the Regional Board to determine if there is a need for additional pump-out stations and dump stations. If there is found to be a need, the Regional Board is to request that the State Water Resources Control Board require specified vessel terminals to install and operate the pump-out and dump stations where necessary to protect water quality. The Regional Board is also required to provide a list of the existing vessel terminals in the area being considered for additional pump-out facilities and dump stations, whether these vessel terminals are privately owned or publicly owned, whether they are for private or public use, and the locations of existing pump-out stations and dump stations.
9. In October 2002, the Orange County CoastKeeper conducted a survey of the pump-out facilities in Huntington Harbour and Newport Bay and found significant deficiencies. Problems noted included inoperable pump-out facilities, poor housekeeping, and little or no access to the existing pump-out facilities.
10. On March 19, 2003, Regional Board staff surveyed several of the pump-out stations surveyed in the CoastKeeper study. Board staff noted similar deficiencies.
11. Based on these surveys and consideration of relevant federal and state guidelines, Board staff has prepared a Pump-out Facilities Need Report (Report) (Attachment to this Resolution). The Report lists the existing publicly and privately-owned vessel terminals in Newport Bay and Huntington Harbour; specifies whether these vessel terminals are for public and/or private use; and, identifies the locations of existing pump-out stations. (There are no existing dump stations in either Newport Bay or Huntington Harbour.) The Report describes the observed deficiencies in the vessel sewage disposal program in both waterbodies and specifies a recommended Vessel Sewage Disposal Program (Attachment A to the Report).
12. Based on the findings of the Report, three additional pump-out stations and three dump stations are necessary in Huntington Harbour; five additional pump-out stations and three dump stations are necessary in Newport Bay. The locations of the needed pump-out and dump stations are specified in the recommended Vessel Sewage Disposal Program. Further, to ensure the success of the vessel sewage waste program in Huntington Harbour and Newport Bay, vessel terminal owners/operators and/or responsible agencies must implement an operation, maintenance, public education and outreach program. The installation and maintenance of these facilities are necessary to protect REC-1 and SHEL beneficial uses in Newport Bay and Huntington Harbour.
13. It is appropriate to request that the State Board adopt requirements necessary to implement the recommended Vessel Sewage Disposal Program.
14. Upon State Board adoption of requirements necessary to implement the recommended Vessel Sewage Disposal Program, it is appropriate to rescind Regional Board Orders No. 88-83, 88-84, 88-85, 88-89, 88-91.

15. The California Department of Boating and Waterways administers the Clean Vessel Act Pump-out Grant Program to reimburse recipients for up to 75% of the installed cost of pump-out stations and dump stations. The grant is available to the private sector and public sector.
16. The Board's adoption of this resolution is exempt from the requirements of the California Environmental Quality Act, Public Resources Code Section 21000 *et seq.*, as an action to protect the environment (Title 14, CCR Section 15308) and the placement of minor structures accessory to existing institutional facilities (Title 14, CCR Section 15311).
17. The Regional Board held public workshops on May 16, 2003 and August 22, 2003 to solicit comments regarding staff's recommendations for additional pump-out facilities, the need for dump stations and the operation, maintenance, public education and outreach and monitoring program specified in the Pump-out Facilities Need Report. Board staff also had extensive discussions with interested agencies and parties, who provided comments leading to modification of the recommended Vessel Sewage Disposal Program.

THEREFORE, BE IT RESOLVED THAT:

1. The Regional Board approves the pump-out facility need delineated in the Pump-out Facility Need Report attached to this Resolution.
2. The Regional Board requests that the State Water Resources Control Board (State Board) adopt requirements implementing the recommended Vessel Sewage Disposal Program shown in Attachment A to the Pump-out Facilities Need Report. This includes requirements for the installation of additional vessel waste disposal facilities at specified vessel terminals and the implementation by responsible parties and agencies of specified operation, maintenance, public education and outreach, and monitoring programs.
3. The Regional Board requests that the State Board consider this request at its earliest possible opportunity.
4. Orders No. 88-83, 88-84, 88-85, 88-89, 88-91, are rescinded upon State Board adoption of requirements necessary to implement the recommended Vessel Sewage Disposal Program.

I, Gerard J. Thibeault, Executive Officer, do hereby certify that the foregoing is a full, true and correct copy of a resolution adopted by the California Regional Water Quality Control Board, Santa Ana Region, on August 22, 2003.

  
for Gerard J. Thibeault  
Executive Officer

California Regional Water Quality Control Board  
Santa Ana Region

August 22, 2003

ITEM: 16

SUBJECT: Vessel Sewage Disposal Program for Newport Bay and Huntington Harbour

**Discussion:**

On May 16, 2003, the Santa Ana Regional Water Quality Control Board (Regional Board) conducted a public workshop to review staff's recommendations for a vessel sewage disposal program for Newport Bay and Huntington Harbour. The May 16, 2003 staff report provided information describing the federal and state regulations and guidelines pertaining to vessel sewage waste and the adequacy of the current vessel sewage disposal program in Newport Bay and Huntington Harbour. The report also outlined preliminary recommendations for a Vessel Sewage Disposal Program for these waterbodies. (This report served as a preliminary Pump-out Facilities Need Report.) Staff recommended that the Regional Board request the State Water Resources Control Board (State Board) to require certain vessel terminal operators to install pump-out facilities and dump stations. In addition, staff recommended that the Regional Board request that the State Board action include requirements for operation, maintenance and public education activities related to vessel sewage disposal systems.

The comments provided at or prior to the May 16, 2003 workshop are summarized in Attachment C, together with Board staff's response. In addition to the comments received at and prior to the workshop, Board staff met with vessel terminal owners, staff of the cities of Huntington Beach and Newport Beach and Orange County to discuss the proposed vessel sewage disposal program. Based on all comments received, staff have revised the proposed Vessel Sewage Disposal Program. The revised program is shown below in the attachment to Resolution No. R8-2003-0074 (specifically, Attachment A to the Pump-out Facilities Need Report). For ease of review, changes to the May 16, 2003 proposed Vessel Sewage Disposal Program are shown in underline/strikeout format. Resolution No. R8-2003-0074 requests that the State Board require implementation of the recommendations of the proposed Vessel Sewage Disposal Program for specific vessel terminal owners/operators, the cities of Huntington Beach and Newport Beach and the County of Orange to install, operate and/or maintain pump-out stations and dump stations in Newport Bay and Huntington Harbour.

**Staff Recommendation:**

1. Staff recommends that the Regional Board adopt Resolution No. R8-2003-0074, adopting the pump-out facility need delineated in the Pump-out Facility Need Report attached to the Resolution, and requesting the State Board to 1) require the installation of additional pump-out facilities and dump stations in Newport Bay and Huntington Harbour at locations specified in the recommended Vessel Sewage Disposal Program, and 2) require the implementation of appropriate operation, maintenance, and public education programs as described in the recommended Program. Adoption of the Resolution would result in rescission of Orders No. 88-83, 88-84, 88-85, 88-89, 88-91, prior pump-out related orders adopted by the Regional Board, upon State Board adoption of requirements necessary to implement the recommended Vessel Sewage Disposal Program.

## **Pump-Out Facilities Need Report**

### **Introduction**

The Harbors and Navigation Code (Chapter 6, Division 3) provides the statutory authority for the State Water Resources Control Board (State Board), in coordination with Regional Water Quality Control Boards (Regional Boards), to develop and adopt regional standards and require installation of sewage disposal facilities at vessel terminals. Vessel terminals are defined in the Harbors and Navigation Code as any private or shore-side installation on any waters of the state that provides mooring, docking, berthing, and other facilities for the use of vessels. The California Code of Regulations (Title 23, Chapters 20 and 20.1) contains standards establishing criteria for the design, construction, operation, and maintenance of pump-out stations and dump stations<sup>1</sup> (Sections 2815 through 2829), and specifies administrative procedures to be followed to provide a standard method of determining which vessel terminals shall be required to install and operate these facilities (Sections 2833 through 2835).

To determine the need for and require the implementation of pump-out stations and dump stations, the Regional Boards and State Board are required to do the following:

- a. Based on consideration of a number of factors that are described below, the Regional Board determines a need for additional pump-out stations and dump stations within its Region, and prepares a Notice of Public Hearing to adopt the Pump-out Facility Need.
- b. The Regional Board requests the State Board to require specified vessel terminals to install and operate the pump-out stations and dump stations where necessary to protect water quality. Once the State Board receives the Regional Board request, the State Board may conduct its own public hearing upon its own motion or at the request of any interested person. A public hearing is required under certain circumstances (see "c." below). After consideration of the Regional Board request and the record of any Regional Board or State Board hearing, the State Board may issue an order requiring vessel terminals to install and operate vessel waste pump-out stations and dump stations. The order would include an implementation schedule.
- c. If the Regional Board determines that there is no public vessel terminal within an area in which additional pump-out stations and/or dump stations are needed, the State Board is required to hold a hearing to determine whether private vessel terminals should be designated to provide pump-out stations and dump stations. Based on the determinations made at that hearing, the State Board may issue an order requiring installation and operation of pump-out stations and dump stations

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<sup>1</sup> A dump station is an upland waste reception facility specifically designed to receive waste from portable toilets carried on vessels or from floating restrooms in the water that are not connected to the land and are used solely by boaters. This does not include upland restroom facilities. (Federal Register Vol. 59 No. 47 pp. 11296)

to the private vessel terminal owner(s), as appropriate. Again, the order would include an appropriate time schedule.

This Pump-out Facilities Need Report summarizes staff's review of the adequacy of the vessel sewage discharge program in the Region and provides recommended actions for the Regional Board and State Board to take in order to improve the vessel sewage discharge program in the Santa Ana Region. The recommended Vessel Sewage Disposal Program is delineated in Attachment A to this report.

### **Background**

Water contact recreation (REC1) is one of the beneficial uses of Huntington Harbour as identified in the 1995 Water Quality Control Plan for the Santa Ana River Basin (Basin Plan). Water contact recreation (REC1) and shellfish harvesting (SHEL) are among the beneficial uses of Newport Bay specified in the Basin Plan. The Basin Plan specifies the following numeric criteria for fecal coliform for the protection of shellfish harvesting and water contact recreation:

REC-1 Fecal coliform: log mean less than 200 organisms/100 mL based on five or more samples/30 day period, and not more than 10% of the samples exceed 400 organisms/100 mL for any 30-day period

SHEL Fecal coliform: median concentration not more than 14 MPN (most probable number)/100 mL and not more than 10% of samples exceed 43 MPN/100 mL.

In 1988, the Regional Board adopted Resolution No. 88-89 and Orders No. 88-83, 88-84, 88-85 and 88-91. Resolution No. 88-89 approved a vessel pump-out program for Newport Bay and the other orders required certain vessel terminals to install vessel pump-out stations. These orders were neither waste discharge requirements nor enforcement actions, and no follow-up was done to determine compliance. Currently, these orders and the resolution are active and would need to be rescinded prior to any action by the State Board.

Both Huntington Harbour and Newport Bay have been designated as No Discharge Zones (NDZs) by the US Environmental Protection Agency (EPA). A NDZ is an area of a water body or an entire water body into which the discharge of sewage (whether treated or untreated) from all vessels is prohibited. NDZ designations are used to prohibit vessel sewage discharges in order to protect environmentally sensitive areas, including shellfish beds, coral reefs, and fish spawning areas, or drinking water sources. States can establish NDZs if they can demonstrate to EPA that safe and adequate pump-out and dump stations are available.

In 1994, both Huntington Harbour and Newport Bay were listed on the Clean Water Act Section 303(d) list of impaired waters due to bacterial contamination. Once a waterbody has been listed on the 303(d) list of impaired waters, states are then required to develop a Total Maximum Daily Load (TMDL) for the pollutant(s) causing impairment. In 1998,

the Regional Board established the Newport Bay Fecal Coliform TMDL to address bacterial contamination in the Bay. The TMDL includes a zero wasteload allocation for vessel waste discharges, in light of the No Discharge Zone status of the Bay. The TMDL requires the City of Newport Beach and the County of Orange to conduct additional studies to assess the effectiveness of the vessel pump-out program. Work on development of the Huntington Harbour bacterial TMDL is expected to begin by Board staff in 2008. It is expected that this TMDL will also include a zero wasteload allocation for vessel waste discharges, since the Harbour is a No Discharge Zone.

### **Recommended Guidelines**

Federal guidelines recommend, as a general rule, at least one pump-out station and dump station for every 300 to 600 boats over 16 feet length overall. This guideline is based on past surveys conducted by U.S. EPA. The California Department of Boating and Waterways has developed pump-out and dump station guidelines that recommend a statewide target of one pump-out and dump station for every 300 boats with Type III marine sanitation devices (MSDs) (i.e., devices that retain sewage for shore-based disposal or discharge beyond the three mile offshore limit).

Neither set of guidelines has been adopted as regulations. Therefore, they are to be regarded as recommendations, rather than enforceable requirements.

### **Costs and Funding**

The cost to install a new vessel waste pump-out station varies depending on the proximity of the vessel terminal to sewer lines, the cost to hook up to the sewer line and associated permit fees. The Department of Boating and Waterways estimates on average a cost of \$20,000 to \$40,000 to install a new pump-out station. Replacement of existing facilities also varies depending on the type of equipment needing replacement. The cost of replacing and/or updating an existing pump-out station ranges between \$3000 and \$10,000. The cost of purchasing and installing a dump station is estimated to be between \$2,000 and \$10,000. The Clean Vessel Act provides federal funds in the form of grants for the installation of pump-out stations and dump stations. In California, these grants are administered through the Department of Boating and Waterways and are available through the year 2007. Grant funds are available to both the public and private sector. The grant will reimburse recipients for up to 75 percent of the installed cost of pump-out and dump stations.

### **Newport Bay and Huntington Harbour Vessel Waste Pump-out Surveys**

In October 2002, the Orange County CoastKeeper performed a survey of vessel waste pump-out stations in Orange County (including those in Huntington Harbour, Newport Bay and Dana Point Harbor<sup>2</sup>). The CoastKeeper report is attached. The survey revealed major issues related to pump-out stations, in particular those located in Newport Bay and Huntington Harbour. These issues include inoperable vessel waste pump-out stations,

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<sup>2</sup> Dana Point Harbor is under the jurisdiction of the San Diego Regional Board.



limited access to the pump-out stations, improper use of the pump-out stations, limited number of pump-out stations, lack of public education on the proper use of these pump-out stations and high bacteria levels in the water in the vicinity of the pump-out stations.

The CoastKeeper report did not include information on dump stations because there are no dump stations in Newport Bay or Huntington Harbour.

The existing vessel waste pump-out stations in Newport Bay and Huntington Harbour are listed in Attachment A, the recommended Vessel Sewage Disposal Program, Tables 1 and Table 2, respectively. On March 19, 2003, Regional Board staff, accompanied by the Orange County CoastKeeper, surveyed several of the pump-out stations listed in the CoastKeeper report to determine their status. A summary of Regional Board staff findings is shown in Attachment A, Table 3. The findings are discussed below. Board staff's findings confirmed the inadequacies found by the Coast Keeper. Board staff compared the results of the Orange County CoastKeeper Vessel Waste survey and Board staff's survey to the recommended guidelines discussed above in evaluating the need for upgrades to the current vessel waste disposal programs.

#### Newport Bay:

As shown in Attachment A, Table 1, there are eight privately owned vessel terminals for public use and one publicly owned vessel terminal for public use in Newport Bay. There are 11 pump-out stations for public use in Newport Bay. Four of these pump-out stations are located on docks, six are located at privately owned vessel terminals, and one is located at a publicly owned vessel terminal. Table 1 lists these vessel terminals and the locations of the pump-out stations and dump stations.

Charter boats in Newport Bay are kept at private docks or at privately owned vessel terminals that are not open for public use. The number and condition of pump-out stations servicing the MSDs in these charter boats is unknown at this time.

Regional Board staff surveyed 8 of the 11 pump-out stations. Problems observed included: limited or no access to several of these pump-out stations; lack of meters to determine usage; and hoses at all the pump-out stations were laying on the slips, which as in Huntington Harbour, could result in backwash or spillage of sewage once the pump is turned off and denotes improper housekeeping practices.

Newport Bay has approximately 10,000 recreational vessels. The majority of these are berthed on moorings and residential piers. A survey conducted in 2000 showed that only about 2,000 of the 10,000 vessels would be docked at a vessel terminal; the rest of the vessels were berthed at residential docks.

The City of Newport Beach estimates that 75% of these 10,000 boats are larger than 16 feet and would require the use of a pump-out station. Of the remaining 25% of the vessels, 15% are smaller than 16 feet and are considered day use vessels, without a need

for a dump station. The remaining 10% are also smaller than 16 feet but would have a portable toilet, thus requiring a dump station.

#### Huntington Harbour:

As shown in Attachment A, Table 2, there are eight privately owned vessel terminals in Huntington Harbour. Three of these vessel terminals each have a pump-out station for public use. There is an additional pump-out station for public use at a lifeguard dock. There are no publicly owned vessel terminals in Huntington Harbour.

Regional Board staff found that one out of the four public pump-out stations in Huntington Harbour was operable. Other problems identified included the use of duct tape to repair hoses, broken valves, lack of signs on how to operate the pump-out stations, lack of signs indicating that the harbour is a designated NDZ, lack of maps indicating the location of vessel waste pump-out stations, lack of current phone number for a contact person in case the pump-out station is inoperable, hoses at all the pump-out stations were laying on the slips (threatening backwash or spillage of sewage containing water once the pump is turned off), and lack of meters on the pump-out stations to determine usage.

The City of Huntington Beach staff estimates that approximately 3,000 boats are moored in Huntington Harbour. It is estimated that a large percentage of the 3,000 boats are greater than 16 feet and would require the use of a pump-out station.

#### Staff Recommendation:

Recommendations for additional pump-out stations and dump stations are based on site-specific considerations. In assessing need for additional pump-out stations and dump stations, the following factors were considered: the number of vessels with sewage retention devices requiring pump-out or dump stations; the location of vessel terminals in the affected area; the location and capacity of existing pump-out stations; and receiving water characteristics, such as its beneficial uses and sensitivity. (The fact that both Newport Bay and Huntington Harbour are designated NDZs speaks to the sensitivity of these waters and the significance of their beneficial uses.) The Department of Boating and Waterways' guidelines and federal guidelines were also considered.

Based on the findings in the CoastKeeper pump-out station survey and the most recent Regional Board staff survey, it is apparent that adequate housekeeping of pump-out stations and education of facility users are major issues that need to be addressed in Newport Bay and Huntington Harbour. In addition, Board staff believes that there is a need for additional pump-out stations and for the installation and proper operation of dump stations. Neither Huntington Harbour nor Newport Bay meet the federal and state guidelines for a minimum number of pump-out stations per numbers of vessels. Both Newport Bay and Huntington Harbour are designated NDZs; however, this designation is contingent, in part, on the demonstration that adequate pump-out stations are available. Finally, as already noted, both water bodies are included on the Clean Water Act Section 303(d) list as the result of bacterial impairment of beneficial uses.

Based on the factors discussed above, staff recommends that the Regional Board and State Board take the actions shown in Attachment A to assure effective vessel waste programs in both Newport Bay and Huntington Harbour.

**Attachments:**

Attachment A – Santa Ana Regional Water Quality Board Vessel Sewage Disposal Program

Attachment B – Orange County CoastKeeper Survey of Pump-out Facilities, October 2002

Attachment C – Response to Comments

**Attachment A**  
**Santa Ana Regional Water Quality Board**  
**Recommended Vessel Sewage Disposal Program**

- Rescission of Resolution No. 88-89 and Orders No. 88-83, 88-84, 88-85, 88-91 by the Regional Board.
- Adoption of a Resolution by the Regional Board that would:
  - Find that a minimum of 7 additional pump-out stations is needed in Newport Bay and a minimum of 3 additional pump-out stations are needed in Huntington Harbour. In addition, there is a need to install and properly operate 3 dump stations in Huntington Harbour and 3 dump stations in Newport Bay.
  - Request the State Board to require the following:

Newport Bay and Huntington Harbour shall adhere to the following standards:

**A. Pump-out Stations:**

1. Each vessel terminal with 50 or more vessels shall have a pump-out station for public use in a accessible location, such as at an end tie; and
2. For every 500 vessels in each harbor, there shall be at least 1 pump-out station for public use, regardless of size of the vessels. This pump-out station shall be easily accessible, such as at an end tie.
3. All pump-out stations shall be equipped with a meter for the purpose of measuring use of the pump-out station.
4. Where the owner/operator of a vessel terminal with 50 or more vessels determines that a pump-out station cannot be installed, it shall contract with a private pumping service for all of its tenants' vessels. The pump-out service shall provide for a minimum of one pump-out per month. The vessel terminal owner/operator shall keep the contract current and shall make the contract available for inspection by the Cities of Newport Beach or Huntington Beach, as appropriate, or the Regional Board.
5. To ensure compliance with Sections A (1) and (2) above, a minimum of 7 pump-out stations in Newport Bay and 3 pump-out stations in Huntington Harbour shall be installed as shown in Figures 1 and 2 and Tables 1 and 2. These pump-out stations shall be installed per the implementation schedule in Section H below.

**B. Dump Stations:**

1. All vessel terminals with a capacity of 50 or more vessels under 26 feet in length shall have a dump station.
2. Dump stations should be located in conjunction with pump-out stations whenever possible.
3. Landside restroom facilities may be used as dump stations at vessel terminals with less than 50 vessels under 26 feet in length.
4. At other facilities such as boat launching ramps that cater to small craft (under 26 feet) a minimum of one dump station should be provided.
5. In order to comply with this section, a minimum of 3 dump stations in Newport Bay and 3 dump stations in Huntington Harbour shall be installed per the schedule in Section H. Also please see Tables 1 and 2.

**C. Plumbing Standards**

1. Each pump-out station and dump station shall be constructed and plumbed such that pipe breakage, fitting failure, and related damage is minimized or eliminated.
2. Each pump-out station and dump station shall be designed and constructed in such a manner that there shall be no leakage or spillage of sewage.
3. Pumps provided at the pump-out station for the transfer of waste from vessels to the pump-out station and from the pump-out station to the disposal system shall:
  - a. Be of self-priming and non-clogging design.
  - b. Be of sufficient size and capacity to complete the transfer operation in a reasonable amount of time when operating against the maximum anticipated head.
  - c. Be designed and installed to prevent leakage or spillage.
  - d. Be designed and installed to meet all safety requirements.
  - e. Be constructed of corrosion-resistant material.
4. All piping/hosing used in the design and construction of a pump-out system shall:
  - a. Be designed to withstand any pumping pressure or vacuum encountered without leakage; and
  - b. Be constructed of material capable of withstanding solar radiation and chemical action of freshwater, salt water, chemical additives, and sewage without excessive deterioration.

- c. All fittings shall be of corrosion-resistant material and shall be so constructed and installed as to ensure a water-tight seal. All pump-out systems shall be designed and constructed to have a minimum capability of pumping out vessel marine sanitation devices having 1 ½ -inch fittings. The system shall be designed and constructed to prevent leakage when transferring or when the system is disconnected. This would normally require a minimum of 4 valves. One on each side of the pump, plus one at the storage tank, and one at the vessel holding tank connection.
5. The pump-out station shall be designed and constructed such that a water supply is available at appropriate locations for flushing and cleaning of vessel holding tanks and storage tanks. The water supply shall be protected against back-siphoning of waste into the water system by a backflow prevention device.
6. Regional Board staff will convene an adhoc committee consisting of the appropriate staff from the County of Orange, the City of Huntington Beach and the City of Newport Beach to develop and implement appropriate construction standards for pump-out stations and dump stations within the Santa Ana Region that would be consistent with the sections listed above.

**D. Cost Provision**

1. While the State encourages the free use of pump-out stations and dump stations a maximum fee of \$5 may be charged consistent with the Department of Boating and Waterways requirements.

**E. Education and Access**

1. All public pump-out stations and dump stations shall be located preferably at an end tie so that they will be visible and easily accessible by vessel operators.
2. Each pump-out station and dump station shall have signage readily visible to traveling vessels and use instructions in English and Spanish and in colorized graphics as to how to operate the station, how to minimize leakage, and how to report an inoperable station.
3. Each vessel terminal operator shall provide a 24-hour phone number for pump-out station and dump station users to report station failures.
4. Each pump-out station and dump station location shall be marked to prevent parking of vessels other than for use of the pump-out station.
5. The Cities of Huntington Harbour and Newport Beach shall notify the owners of slips in front of residences that each harbor is an NDZ and that

it is illegal to discharge the contents of their MSDs into the NDZ waters of the State (Newport Bay and Huntington Harbour). Along with the notification, each City shall provide a map identifying the location of the pump-out stations and dump stations.

6. Vessel terminal owners/operators shall notify the owners/operators of vessels occupying their terminals that Newport Bay and Huntington Harbour are No Discharge Zones (NDZ) and that it is illegal to discharge the contents of their MSDs into the NDZ waters of the State (Newport Bay and Huntington Harbour). The vessel terminal owners/operators shall provide owners/operators of vessels occupying their terminals a map identifying the location of the pump-out stations and dump stations.

**F. Operation and Maintenance**

1. Vessel terminal owners/operators shall prepare a set of operation and maintenance instructions to be used in the operation and maintenance of the pump-out station/dump stations. The operation and maintenance instructions shall be available for inspection at the pump-out station/dump station and if found to be deficient by Regional Board staff, the vessel terminal owner/operator shall correct the instructions within 30 days.
2. The operation instructions shall have a detailed explanation of valve positions when the system is transferring sewage and when the pump-out station/dump station is not being used.
3. The operation and maintenance instructions shall include methods that will be used to isolate portions of the pump-out station/dump station system for maintenance and repair.
4. All pump-out stations/dump stations shall be operated and maintained in such a manner that there shall be no leakage or spillage of sewage.
5. The vessel terminal owner/operator shall inspect their pump-out stations and dump stations at least three times per week during October 1 through May 31 and five times per week during June 1 through September 30th. The purpose of such inspection is to ensure the pump-out stations/dump stations are working properly and there are no leaks of sewage into the receiving waters.

Vessel terminal owners/operators must keep in stock readily replaceable spare parts such as hoses. When a pump-out station or dump station is inoperable, its owner shall initiate appropriate repairs within 24 hours of noticing the inoperability. Where the inoperability is found to be due to the failure of a readily replaceable part, such as a hose, the repair must be done within 24 hours. Where necessary, the vessel terminal owner/operator shall secure a licensed plumbing contractor who would assess the reason that the

pump-out station/dump station is not working properly, identify the steps required to bring that pump-out station/dump station back into working order, and identify a reasonable time frame to complete the necessary repairs. The vessel owner/operator must initiate the repairs promptly, and to take all reasonable steps to assure that the repairs are completed within the time frame identified by the contractor. The vessel terminal owner shall post a sign on the pump-out station/dump station indicating that it is not working, with a map of other locations of pump-out stations/dump stations.

6. Vessel terminal owners/operators must maintain, and provide for inspection at any time, maintenance and monitoring logs at the site of each pump-out station and dump station.
7. In addition, the Cities of Newport Beach and Huntington Harbour shall inspect each pump-out station and dump station to ensure that the pump-out stations and dump stations are operational and that vessel terminal operators keep the necessary maintenance logs. These inspections shall be performed at least monthly.<sup>3</sup>

#### **G. Live-aboard Vessels**

1. Vessel terminals with live-aboard vessels shall require all live-aboard vessels that are incapable of moving under their own power to have all overboard discharge piping permanently sealed, unless such discharge piping is plumbed directly to appropriate on-shore waste facilities.
2. Vessel terminal owners/operators shall inspect all live-aboard vessels monthly to ensure that all overboard discharge piping has been sealed. A log of these inspections shall be kept at the vessel terminal and made available to the staff of the Regional Board or to staff from the Cities of Newport Bay and Huntington Harbour.
3. Vessel terminal owners/operators with live-aboard vessels capable of moving under their own power shall notify the occupants of such vessels that it is illegal to discharge the contents of their holding tanks into the NDZ waters of the State (Newport Bay and Huntington Harbour) and require them to use a pump-out-station or to subscribe to a pump-out service.
4. The Cities of Newport Beach and Huntington Beach will be responsible for quarterly inspections of those Live-aboard vessels that are tied on off-shore moorings to ensure that these vessels do not discharge the contents

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<sup>3</sup> The County of Orange shall be responsible to implement these inspection requirements for those vessel terminals leased by the County to private parties and for those pump-out stations/dump stations directly under the control of the County.



of their holding tanks into the NDZ waters of Newport Bay or Huntington Harbour.

5. The Cities of Newport Beach and Huntington Beach will be responsible for quarterly inspections of any over the water public restroom or marine head facilities that are attached to the bulkhead or pier line to ensure that these are working, are easily accessible to the public and conduct repairs and general maintenance of the plumbing system to ensure these facilities do not become a source of pollutants into Newport Bay or Huntington Harbour.
6. Vessel Terminal owners/operators and the Cities of Newport Beach and Huntington Beach will be responsible for updating lease agreements with the live-aboards to ensure that there is adequate authorization for the vessel terminal owner/operator or city staff to board the live-aboard vessels and conduct inspections that would ensure that all overboard discharge piping has been sealed.

#### **H. Periodic Review of Effectiveness**

1. The Regional Board shall oversee compliance with the State Board order by the vessel terminal operators and the cities of Huntington Harbour and Newport Beach. Oversight by the Regional Board shall include at a minimum annual inspections, regular collection of samples and review of bacterial data collected from the receiving waters in the vicinity of the pump-out stations.
2. The Regional Board shall also review the effectiveness of the vessel waste pump-out program at a minimum of every 2 years to determine if revisions of the pump-out station standards are necessary to achieve protection of water quality.

#### **I. Time Schedule:**

Regional Board staff requests the State Board to require that the pump-out stations/dump stations be installed and in operation within 6 months of the adoption of the State Board order. Regional Board staff recommends the following time schedule (subject to adjustment based on the State Board's adoption of the relevant order)

| <u>Task</u>   | <u>Compliance Date</u> |
|---|------------------------|
| <b>Vessel terminal operators required to install pump-out /dump stations shall:</b>   |                        |
| <ul style="list-style-type: none"> <li>Indicate commitment to install the additional pump-out stations and/or dump stations via letter to the Executive Officer of the Regional Board.</li> </ul>   | 1/5/04                 |
| <ul style="list-style-type: none"> <li>Prepare and submit plans and specifications for pump-out station/dump station installation to the Executive Officer of the Regional Board. If the Executive Officer does not approve of the pump-out station and/ dump station location, or determines the plans and specifications are inadequate, the vessel terminal operator shall prepare new or supplemental plans and specifications in accordance with a schedule set by the Executive Officer of the Regional Board.</li> </ul> | 2/5/04                 |
| <ul style="list-style-type: none"> <li>Submit Plans and agreements for pump-out station/dump station maintenance to the Executive Officer of the Regional Board</li> </ul>  | 3/5/04                 |
| <ul style="list-style-type: none"> <li>Begin construction and installation of pump-out station/dump station.</li> </ul>   | 6/5/04                 |
| <ul style="list-style-type: none"> <li>Complete construction and installation of pump-out station/dump station.</li> </ul>  | 7/6/04                 |
| <ul style="list-style-type: none"> <li>Full compliance with State Board order; notify Executive Officer of the Regional Board.</li> </ul>   | 8/6/04                 |

Tables 1 and 2  
 Figures 1 and 2

Table 1: Newport Bay Vessel Terminals, Anchorages, Piers, Pump-outs and Dump Stations - April 2003 Survey

| Name   | Address                                | Phone          | Slips | Pump Out<br>On Site - Yes<br>/ No | Vessel Terminal<br>Classification /<br>Pump-out | Dump Station<br>on site - yes/no | Vessels<br>under 26<br>feet |
|--|--|----------------|-------|-----------------------------------|---|----------------------------------|-----------------------------|
| Port Calypso   | 2633 West Coast Hwy, 92663             | (949) 645-6900 | 50    | No                                | Private   | No                               | no data                     |
| Ardell Marina  | 2101 West Coast Hwy, 92663             | (949) 642-5735 | 55    | No                                | Private   | No                               | 2                           |
| Swales Yacht Anchorage*  | 2888 Bayshore Dr, 92663                | (949) 548-1501 | 57    | No                                | Private   | No                               | 17                          |
| Bayshores Marina*  | 301 Shipyard Way, 92663                | (949) 723-7781 | 135   | No                                | Private   | No                               | 62                          |
| Bahia Corinthian Yacht Club*   | 1601 Bayside Dr, 92625                 | (949) 644-9530 | 75    | No                                | Private   | No                               | 1                           |
| Icon Yacht Charters  | 3400 Via Oporto, STE 104, 92663        | Unknown        | 1     | Yes                               | Private / Private                               | No                               | n/a                         |
| Larson's Shipyard  | 2703 W. Coast Hwy, 92663               | (949) 650-2688 | 1     | Yes                               | Private / Private                               | No                               | n/a                         |
| Nautical Museum  | 151 E. Coast Hwy, 92660                | (949) 673-0300 | 1     | Yes                               | Private / Private                               | No                               | n/a                         |
| Adventures at Sea  | 3101 W. Coast Hwy, STE 209, 92663      | (949) 650-2412 | 3     | Yes                               | Private / Private                               | No                               | n/a                         |
| Pavilion   | 111 & 111 1/2 Marine Ave, 92662        | (949) 632-6363 | 5     | Yes                               | Private / Private                               | No                               | n/a                         |
| Hornblower Yacht Charter   | 2431 W. Coast Hwy, 92663               | (949) 646-0155 | 6     | Yes                               | Private / Private                               | No                               | n/a                         |
| Orca Yacht Charters  | 2901 W. Coast Hwy, 92663               | (949) 650-6722 | 6     | Yes                               | Private / Private                               | No                               | n/a                         |
| Fun Zone Boat Co.  | 600 Edgewater Place, 92661             | (949) 673-0240 | 10    | Yes                               | Private / Private                               | No                               | n/a                         |
| Crow's Nest Marina   | 2801 W. Coast Highway, STE 260, 92663  | (949) 574-7600 | 20    | Yes                               | Private / Private                               | No                               | n/a                         |
| Lido Yacht Anchorage / Dry Storage<br>(Bellport)## (1additional pump-out station proposed) | 201 Shipyard Way, STE 1, 92663         | (949) 673-9330 | 265   | Yes                               | Private / Private                               | No                               | 17                          |
| American Legion (use 15th St. public pier)   | 215 15th Street, 92663                 | (949) 673-5070 | 50    | Yes                               | Private / Public                                | No                               | 0                           |
| Harbor Marina  | 3333 W. Coast Hwy, 92663               | Unknown        | 50    | Yes                               | Private / Public                                | No                               | 10                          |
| Lido Village Marina  | 3400 Via Oporto, STE 104, 92663        | (949) 675-8662 | 85    | Yes                               | Private / Public                                | No                               | 15-18                       |
| Balboa Bay Club  | 1221 West Coast Hwy, 92663             | (949) 654-5000 | 140   | Yes                               | Private / Public                                | No                               | no data                     |
| Balboa Yacht Basin   | 829 Harbor Island Dr, 92660            | (949) 673-1761 | 171   | Yes                               | Private / Public                                | No                               | 4                           |
| Bayside Village (De Anza)##  | 300 East Coast Hwy, 92660              | (949) 673-1331 | 225   | Yes                               | Private / Public                                | No                               | 100                         |
| Newport Dune Resort Marina & Launch#   | 101 N. Bayside Dr, 92660               | (949) 729-1100 | 232   | Yes (2)                           | Private / Public                                | No                               |                             |
| Balboa Marina*   | 201 East PCH, 92660                    | (949)723-7781  | 132   | No                                | Private   | No                               |                             |
| Bayside Marina   | 1353 Bayside Drive, 92625              | (949) 644-9730 | 101   | Yes                               | Private / Public                                | No                               |                             |
| 15th St. Public Pier   | 15th St.                               | tbd            | 0     | Yes                               | Public  | No                               | n/a                         |
| Fernando St. Public Pier   | Fernando St.                           | tbd            | 0     | Yes                               | Public  | No                               | n/a                         |
| Harbor Patrol  | 1901 Bayside Dr, 92625                 | (949) 723-1002 | 0     | Yes (2)                           | Public  | No                               | n/a                         |
| Washington St. Public Pier   | Balboa Pavilion - Fun Zone             | tbd            | 0     | Yes                               | Public  | No                               | n/a                         |
| Blue Water Grill Marina  | 25 Cambria Drive, Corona del Mar 92625 | (949) 631-2110 | 14    | yes                               | Private/Private                                 | No                               |                             |
| <b>* proposed pump-out station</b>   |  |                |       |                                   |   |                                  |                             |
| <b>#Proposed dump station</b>  |  |                |       |                                   |   |                                  |                             |
| <b>Public means available for public use</b>   |  |                |       |                                   |   |                                  |                             |
| <b>Private means not available for public use</b>  |  |                |       |                                   |   |                                  |                             |
| <b>None/Private means no pump-out station, private marina</b>                              |  |                |       |                                   |   |                                  |                             |
| <b>Private/Private means private marina/ private pump-out station</b>                      |  |                |       |                                   |   |                                  |                             |
| <b>Private/Public means private marina, public pump-out station</b>                        |  |                |       |                                   |   |                                  |                             |
| <b>Public/not a marina means public pump-out station at a public dock</b>                  |  |                |       |                                   |   |                                  |                             |

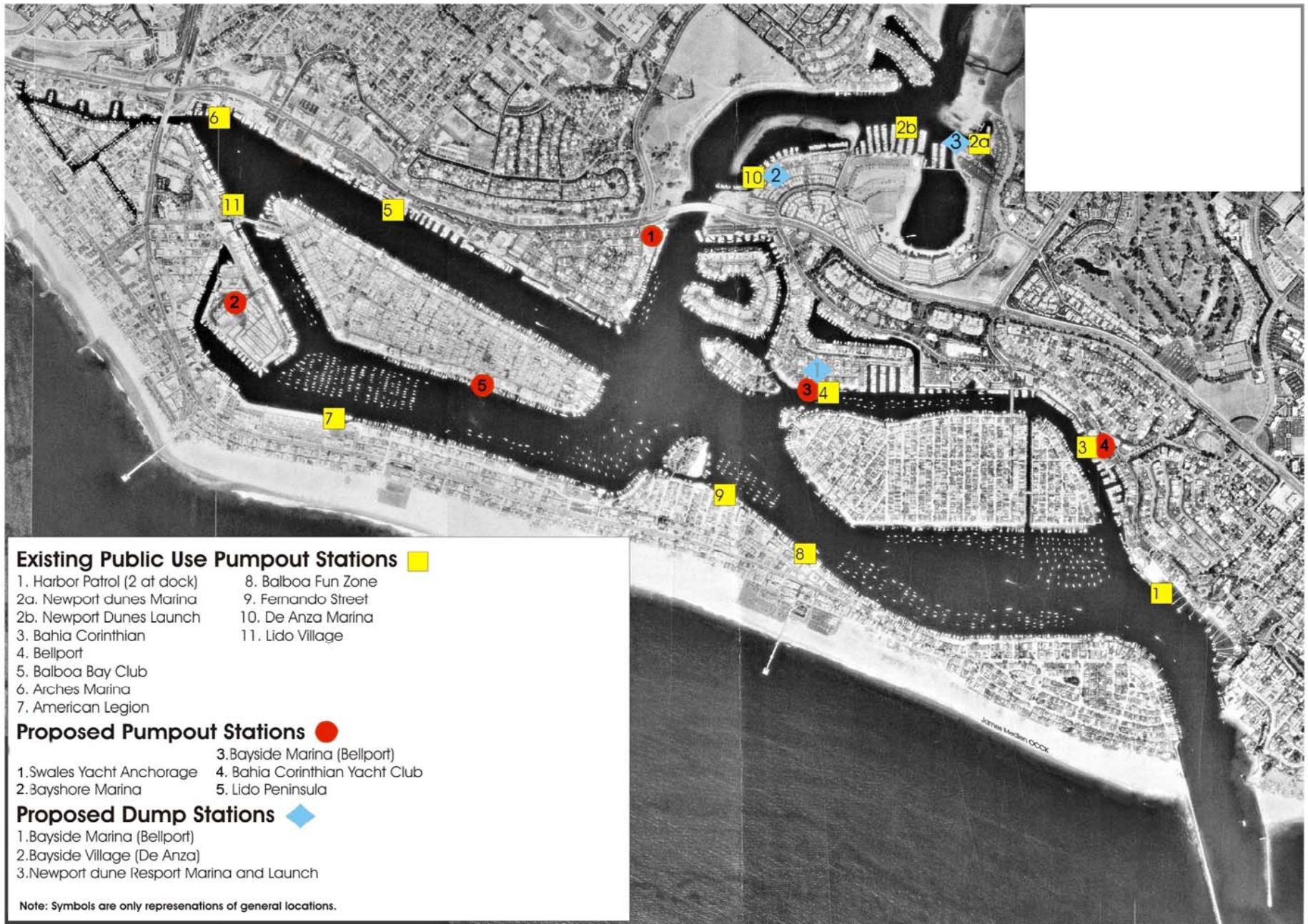
**Table 2**

**Huntington Harbour Vessel Terminals and Pump-outs and Dump Stations**

| Name   | Address   | Phone          | Slips | Pump Out<br>On Site -<br>Yes / No | Pump-out /<br>Vessel terminal<br>Classification | Dump Station<br>on site -<br>yes/no | Vessels<br>under 26' |
|--|---|----------------|-------|-----------------------------------|---|-------------------------------------|----------------------|
| Davenport Marina*  | 4052 Davenport Drive, Huntington Beach 92649                  | (714) 840-6285 | 65    | No                                | none/Private                                    | No                                  | no data              |
| Coral Cay Marina*  | 27405 Puerta Real Suite 300, Mission Viejo 92691              | (949) 582-7770 | 58    | No                                | none/Private                                    | No                                  | 15                   |
| Tennis Club Estates*   | 2888 Bayshore Dr, 92663                                       | (714) 846-3225 | 63    | No                                | none/Private                                    | No                                  | 15                   |
| Harbor Lane Condos   | 13812 Goldenwest Street Suite 100, Westminster 92683          | (714) 846-6725 | 62    | No                                | none/Private                                    | No                                  | 21                   |
| Portofino Marina   | 1601 Bayside Dr, 92625  | (714) 377-9349 | 49    | No                                | none/Private                                    | No                                  | n/a                  |
|  |   |                |       |                                   |   |                                     |                      |
| Peters Landing Marina  | 16400 Pacific Coast Highway Suite 108, Huntington Beach 92649 | (714) 840-1387 | 325   | Yes                               | Public/Private                                  | No                                  | 10                   |
| Huntington Marina  | 4281 Warner, Huntington Beach 92646                           | (714) 840-5545 | 190   | Yes                               | Public/Private                                  | No                                  | 12                   |
| Sunset Aquatic Marina# (2 dump stations proposed)                  | 2901 A Edinger Ave Huntington Beach 92649                     | (714) 846-0179 | 262   | Yes                               | Public/Private                                  | No                                  | 100                  |
| Lifeguard Dock#  | City of Huntington Beach                                      | Unknown        | 0     | Yes                               | Public/not a marina                             | No                                  | n/a                  |
|  |   |                |       |                                   |   |                                     |                      |
| * proposed pump-out stations                                       |   |                |       |                                   |   |                                     |                      |
| #proposed dump station   |   |                |       |                                   |   |                                     |                      |
| Public means available for public use                              |   |                |       |                                   |   |                                     |                      |
| Private means not available for public use                         |   |                |       |                                   |   |                                     |                      |
| None/Private means no pump-out station, private marina             |   |                |       |                                   |   |                                     |                      |
| Private/Private means private pump-out station, private marina     |   |                |       |                                   |   |                                     |                      |
| Private/Public means private pump-out station, public marina       |   |                |       |                                   |   |                                     |                      |
| Public/not a marina means public pump-out station at a public dock |   |                |       |                                   |   |                                     |                      |



# Newport Harbor Existing and Proposed Pumpout and Dump Stations





# Huntington Harbour Existing and Proposed Public Use Pumpout and Dump Stations

